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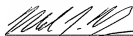
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in the following listed application(s) or patent(s) for which the issue fee has been paid.

<u>Patent No.</u>	<u>Serial No.</u>	<u>Patent Date</u>	<u>Filing Date</u>	<u>Confirmation No.</u>	<u>Attorney Docket No.</u>
7,646,143B2	09/837,105	01/12/2010	04/18/2001	9007	SEL253

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US007646143B2

(12) United States Patent
Kimura**(10) Patent No.: US 7,646,143 B2**
(45) Date of Patent: Jan. 12, 2010**(54) SELF-LIGHT EMITTING DEVICE AND ELECTRICAL APPLIANCE USING THE SAME****(75) Inventor: Hajime Kimura, Kanagawa (JP)****(73) Assignee: Semiconductor Energy Laboratory Co., Ltd. (JP)****(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 805 days.**(21) Appl. No.: 09/837,105****(22) Filed: Apr. 18, 2001****(65) Prior Publication Data**

US 2001/0035713 A1 Nov. 1, 2001

(30) Foreign Application Priority Data

Apr. 21, 2000 (JP) 2000-121854

(51) Int. Cl.**H01J 1/62** (2006.01)**H01J 63/04** (2006.01)**H01K 1/26** (2006.01)**(52) U.S. Cl.** 313/501; 313/483; 313/498; 313/500; 313/504; 313/505; 313/110; 313/112**(58) Field of Classification Search** 313/501, 313/503, 504, 506, 509; 257/59, 72, 347, 257/348, 349; 345/77

See application file for complete search history.

(56) References Cited**U.S. PATENT DOCUMENTS**5,206,746 A * 4/1993 Ozi et al. 349/62
5,396,350 A 3/1995 Beeson et al. 359/405,555,109 A 9/1996 Zimmerman et al. 359/40
5,598,281 A 1/1997 Zimmerman et al. 349/5
5,608,286 A * 3/1997 Levine et al. 313/495
5,637,958 A * 6/1997 Levine 313/496
5,684,365 A * 11/1997 Tang et al. 315/169.3
5,771,328 A * 6/1998 Wortman et al. 385/146
5,781,255 A * 7/1998 Yamamoto et al. 349/46
5,814,416 A 9/1998 Dodabalapur et al.
5,920,080 A * 7/1999 Jones 257/40
5,932,892 A * 8/1999 Hsueh et al. 257/59
5,944,405 A 8/1999 Takeuchi et al. 362/31
5,990,629 A * 11/1999 Yamada et al. 315/169.3

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0 787 271 B1 8/1997

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 09/631,067 (pending) to Kimura, including specification, claims, abstract, drawings and PTO filing receipt.

(Continued)

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(74) *Attorney, Agent, or Firm*—Cook Alex Ltd.**(57) ABSTRACT**

A self-light emitting device and an electrical appliance including the same are provided, in which extracting efficiency of light from a light emitting element, especially in an EL element, can be improved. A light scattering body formed by etching a transparent film is provided on an insulator so that the extracting efficiency of light can be improved, and the self-light emitting device with high efficiency of light emission can be provided.

20 Claims, 16 Drawing Sheets